



infrared receiver on the front of this unit for communicating with the RAT.

The package has a sheet of instructions that explain how the joypad is used and what games can be played with it (any software that is Kempston joystick-compatible). With great foresight, Cheetah has included routines in BASIC and machine code that enable you to incorporate RAT control in your own games.

The instruction sheet claims that the RAT can be used at distances up to 12 feet by aiming 'in the general direction of the computer'. Movement is effected by pressing lightly on the blue control pad. There are eight small 'bumps' on the periphery of the pad, and pressing on or near one of these indicates the direction required — N, SW, and so on, rather like the directions on a compass. While one hand holds the RAT and controls the direction of movement on the screen, the other hand can be used to press the fire 'button'. Because of the design of the RAT, it makes no difference which hand performs each task, so the joypad works equally well for left- and right-handed players. The transmitter requires one PP3 battery, which fits into a small space at the back of the unit directly below the blue control circle.

Once the interface box is connected, the transmitter unit has been fitted with a battery and a game requiring joysticks has been loaded into your Spectrum, then you are ready to play. Because there is no visible sign that the transmitter is working until you can see movement on the screen, you might find yourself sticking as close to the computer as you would with any other joystick. There is a certain reluctance to believe the claims of a 12-foot control distance. But when you realise that the RAT really works, you will want to experiment to see how far it can go.

In fact, the remote action transmitter works extremely well at distances even slightly over 12 feet. And it doesn't have to be pointed in the general direction of the computer. The RAT works when pointed straight up at the ceiling, down at the floor, over your back or sideways (although it is slightly difficult for you to see what you are doing when the transmitter is pointed at odd angles). Clearly, the Cheetah RAT gives a games player a tremendous freedom to move around. The biggest drawback, however, is that it has only eight positions of movement — up, down, right, left, and intermediate points. It would be better to have more control than this.

The fact that the RAT has no moving parts makes the unit less prone to wear and tear than standard joysticks, so it should last a long time. In fact, it comes with a year's warranty. At £29.95, the Cheetah RAT costs only slightly more than most other joysticks plus Interface 2. (Of course, if you already have Interface 2, this is not much consolation.) But its play allows much more freedom of movement and far better control than most joysticks.

#### CHEETAH REMOTE ACTION TRANSMITTER INFRARED JOYPAD

**FOR:** Sinclair ZX Spectrum

**PRICE:** £29.95, including interface box

**WORKS WITH:** Cheetah compatible or Kempston joystick compatible games

**FROM:** Cheetah Marketing Ltd, 24 Roy St, London EC1

CHRIS STEVENS



#### Mixed Reception

The original keyboard of the long-awaited IBM PC Junior was noted mainly for the low quality of its appearance and engineering, but it was also the first microcomputer with infrared linking between keyboard and processor